

NEW FORMS OF NORTH AMERICAN *CHORDILES*.

BY ELLIOTT COUES.

EXAMINATION of material in the American Museum of Natural History, in company with Mr. Allen and Mr. Sennett, shows that there are four subspecies of *Chordiles popetue* in the United States. The mistake has hitherto been that we have called all the light Western forms *C. henryi*, and have ignored the distinction of the Florida bird. The four forms are :

1. **Popetue**, large, glossy black predominating on the upper parts, and underparts fully barred with blackish and white in about equal amounts, the rufous tints being slight on any part of the plumage. *Hab.* Eastern North American Province of Baird, the breeding range exclusive of the Gulf States.

2. **Sennetti**, large, silvery grayish-white predominating above, the white below greatly in excess of the narrow, irregular or broken, dark bars, and little or no rufous anywhere. *Hab.* Dakota to Texas, in any treeless country. Types 65,490, Mus. Smiths. Inst., formerly 3301, Mus. E. C., 50 miles west of Pembina, Minn., July 16, 1873, and 4927, Coll. George B. Sennett, Wharton Co., Texas, May 27, 1887.

3. **Henryi**, large, rufous tints everywhere prevailing, dark lines on underparts about equal in amount to the tawny white interspaces. *Hab.* Western North America; geographical distribution not yet fully worked out.

4. **Chapmani** (Sennett's MS.), small, wing half an inch less than in *popetue*, with which the coloration agrees. *Hab.*, Florida to Texas. Type No. 847, Coll. Frank M. Chapman, to which accomplished young ornithologist the new form is dedicated by Mr. Sennett, taken May 19, 1887 at Gainesville, Florida.

OBSERVATIONS ON THE NOCTURNAL MIGRATION OF BIRDS.

BY FRANK M. CHAPMAN.

MR. W. E. D. SCOTT'S papers on this subject (Bulletin Nuttall Ornithological Club, Vol. VI, pp. 97, 188) have not to my knowledge been followed by any of a similar character, and, the facts to be determined being of such vital interest, I feel urged to present the results of my own observations, limited though they